Postal Regulatory Commission Submitted 7/27/2021 3:39:34 PM Filing ID: 119379 Accepted 7/27/2021

#### BEFORE THE POSTAL REGULATORY COMMISSION WASHINGTON, D.C. 20268–0001

FIRST-CLASS MAIL PACKAGE SERVICE (FCPS) SERVICE STANDARD CHANGES, 2021

Docket No. N2021-2

# RESPONSES OF THE UNITED STATES POSTAL SERVICE TO QUESTIONS 1-9 OF PRESIDING OFFICER'S INFORMATION REQUEST NO. 6 (July 27, 2021)

The United States Postal Service hereby provides its responses to the abovelisted questions of Presiding Officer's Information Request No. 6, issued on July 20, 2021. Each question is stated verbatim and followed by the response.

Respectfully submitted,

UNITED STATES POSTAL SERVICE

By its attorneys:

Anthony Alverno Chief Counsel, Global Business & Service Development

Eric P. Koetting Elizabeth A. Reed C. Dennis Southard IV

475 L'Enfant Plaza, S.W. Washington, D.C. 20260-1135 (202) 268-6284 dennis.southard@usps.gov July 27, 2021

## RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS KIM TO PRESIDING OFFICER'S INFORMATION REQUEST NO. 6 (REDIRECTED FROM WITNESS HAGENSTEIN)

1. Please refer to USPS-T-1 at 4, lines 5-7. The Postal Service states that "[a]n estimated 14 to 48 percent reduction in the number of air charters may be possible depending on the final volume of the lanes identified to shift from air to surface transportation." Please provide the source data and calculations used to estimate the percentage reduction in the number of air charters. If the calculation is not available, please explain the basis for the above statement. Additionally, please discuss the relationship between capacity required, quantity of air charter trips, accrued cost, and attributable cost for the air charter cost driver.

#### **RESPONSE:**

Witness Hagenstein provided the source data and calculations used to estimate the percentage reduction in the number of air charters in USPS-LR-N2021-2-NP6, in conjunction with his response filed on July 8, 2021, to POIR No. 2, question 12, part a. Charter costs are 100 percent volume variable, meaning that if volume or capacity increases by 10 percent, then the accrued costs would also increase by 10 percent. See Summary Description of USPS Development of Costs by Segments and Components, Fiscal Year 2019 (July 1, 2020), "CS14-19.docx", at 14-3. Because attributable costs include volume variable costs, 100 percent of accrued charter costs are attributable.

- 2. Please refer to USPS-T-1 at 13, lines 13-16. The Postal Service states that "[c]osts for local transportation currently average \$2.55 per mile, and typically range from \$1.70 per mile to as much as \$2.90 per mile. The cost of network surface transportation currently averages approximately \$2.20 per mile, and ranges from \$1.90 per mile to over \$3.00 per mile."
  - Please confirm that increase in utilization of surface transportation, including trucks filled closer to capacity, will cause an increase in fuel costs.
  - b. If confirmed, please provide the projected costs for local transportation and network surface transportation that reflect an increase in fuel costs.
     Please also explain why the Blue Yonder Transportation Modeler (TMOD) does not account for an increase in fuel costs.
  - c. If not confirmed, please explain.

- **2.a.** Not confirmed.
- **2.b.** N/A
- **2.c.** Utilization is not a factor in HCR contract rates. Fuel cost is a factor, but is not dependent upon utilization. HCR contracts will charge the same for fuel for a 100 percent load and a 0 percent load.

- 3. Please refer to USPS-T-1 at 17 lines 21-23, and at 18, lines 1-2. The Postal Service states that "[t]he reduction in airline assignments and associated handling at origin, plus the reduction in sack handling at destination, is expected to improve efficiencies in the processing centers. This efficiency gain is expected to reduce workhours, but not to a degree anticipated to impact employee complement."
  - a. Please confirm that the Postal Service has not provided any analysis of mail processing cost savings expected to result from the proposal.
  - b. If confirmed, please discuss the benefits of achieving efficiency gain from the reduction of workhours without associated cost savings.
  - c. If not confirmed, please provide an analysis demonstrating the calculations for expected mail processing cost savings.

- **3.a.** Confirmed
- **3.b.** The Postal Service could expect improvements in efficiencies which would translate into a reduction of workhours and costs, even where the volume of reduced workhours does not result in a reduced complement. Analysis around the expected reduction in workhours and costs was not estimated or included in this docket. The focus of this proposal is on the transportation and service benefits.
- 3.c. N/A

- 4. Please refer to USPS-T-1 at 20, lines 4-16. The Postal Service states that "[p]ackage volume was derived from the Postal Service's Product Tracking & Reporting (PTR) System. The second highest Wednesday volume from October 2020 was selected. The Postal Service observed unprecedented growth in package volumes during the pandemic, and it was believed that a significant portion of that volume would remain after the end of the pandemic. Package volume trends were monitored and appeared to stabilize in the September and October timeframe, and October was selected for a representative volume for packages. All other volume in the model is based on March 2019 WebODIN (renamed from ODIS) data that is a monthly total by Origin 3-digit ZIP Code, Destination 3-digit ZIP Code, class, and shape. FCPS volumes were compared and scaled to match the USPS monthly Revenue & Volume Comparison (RVC) report for March 2020. March is historically an average month in the seasonal mail volume cycle and is not skewed by holiday impacts. The volume used for the modeling represents the second-highest Wednesday in the month of March."
  - a. Please explain the reason(s) for the decision to use different time periods for FCPS package volume and other FCPS volume in the model.
  - b. Please explain the reason(s) for the decision to use the second-highest Wednesday instead of the average Wednesday for modeling.
  - c. Please explain why the Postal Service determined that a single month was sufficient for modeling year-round trends. Please include a discussion on the potential shortcomings of the model for not accounting for the holiday months.
  - d. Please discuss how transportation assignments and transportation costs vary between average volume periods and peak load periods. Please explain how applicable the transportation modeling that uses March and October volumes is for the months of November and December.

#### **RESPONSE:**

**4.a.** As mentioned, March is typically a representative timeframe for an average period of the year and was selected for the letters and flats volume. In FY 2020, packages did not follow a historic seasonal trend due to the COVID pandemic, and therefore selecting March for packages as well would not have been a fair representation of expected volumes. Package volume projections appeared to stabilize, or plateau in September and October of 2020, and for that reason, October 2020 was

selected for pulling package volume data. October would not have been representative of an average period for letter and flat volume due to the impact from the election.

- **4.b.** The second highest Wednesday was used to be more conservative on the volume figures. The average will be slightly less than the second highest Wednesday and might understate volumes.
- **4.c.** Using a typical month to plan daily transportation is more likely to align with typical daily operations. The intent was to mitigate the risk of overstating or understating volumes and transportation requirements. This transportation would be appropriate for the typical days the Postal Service expects to experience most of the time. The Postal Service has separate planning for peak season and holidays, independent of the model. Not modeling the year-round transportation would potentially make comparisons to actual annual transportation costs somewhat more difficult.
- **4.d.** As stated in 4c, the Postal Service regularly experiences a spike in demand during the peak season months. As a result, the Postal Service has planning teams that establish temporary supplemental transportation to accommodate the added demand. The transportation in place today satisfies the average demand through most of the year. At the start of the peak period at the end of November and through December, substantial peak transportation lanes are put in place to cover the additional volumes in the air network, local and long-haul surface networks.

- 5. Please refer to Responses to POIR No. 2, question 14.b. The Postal Service states that "Special Service Code (SSC) 401 is an optional code employed to identify [the] pharmaceutical volume. FCPS volume with this SSC in the data set used to identify pharmaceutical volume between pairs and determine the percentage impacted by the proposed service standard change."
  - Please discuss whether the Postal Service has considered excluding pharmaceutical mail from the proposed service standard change.
  - b. Please discuss the operational feasibility of excluding pharmaceutical mail from the proposed service standard change.

- **5.a.** To my knowledge, excluding pharmaceuticals from the service standard change was not considered.
- **5.b.** Pharmaceutical shippers could upgrade to Priority Mail service to increase the speed of shipping, where necessary. Creating a separate service standard for pharmaceuticals could be possible, but would essentially create a separate product, priced the same as FCPS but following a faster, more expensive network path. Separating pharmaceuticals from the FCPS population would increase costs and require separate handling at Origin (i.e. dedicated machines) to prevent it from following the FCPS network.

- 6. Please refer to USPS-T-1 at 23, lines 4-5, and lines 13-15. The Postal Service states that "PC\*Miler uses the road speed limits to determine transit time and does not currently adjust for traffic." The Postal Service also states that "[w]hile optimizing routings, the model checks proposed routings against the ART file to ensure they are valid and determine whether a tariff is applied to influence desired routing behavior."
  - a. Please discuss the potential impacts of not adjusting for traffic in the model.
  - b. Does the Postal Service monitor the effect of traffic on travel time? If yes, please explain why this data is not used in the model to reflect a more realistic travel time. If no, please explain why this data is not collected.
  - c. Please define "tariff" and ART file.
  - d. Please give a quantitative and qualitative example of a "tariff" in the context of influencing routing.
  - e. Please explain what potential tariffs the Postal Service applies to influence desired routing behavior.

- **6.a.** Impacts are mostly isolated to major metro areas where traffic would cause shorter distances to take a significantly larger portion of time to travel. Trips that travel longer distances are less likely to be impacted by traffic when accounting for the overall trip. Given that the majority of current and future state mileages are in the inter-area categories which tend to be longer distances, the overall impacts would be less likely to impact the projections. Local transit speeds were included in the model for areas in the Northeast. The transit times were provided based on contracted speeds and compared to transit speeds in PC\*Miler.
- **6.b.** The Postal Service will account for traffic and transit speed constraints when developing plans if it is a known route with existing trips to reference. Suppliers negotiate travel times if they feel the proposed plan does not account for adequate time.

After a contract has been awarded, the performance is monitored and the trip departure and arrival times are adjusted, if warranted.

- **6.c.** The term "tariff" simply refers to set of rates and paths of travel that the model is allowed to use when determining the routings. The model cannot build a routing without an associated cost and lane. An extreme example would be trying to make a routing from California to Hawaii using a surface tariff. That lane would not be defined as a valid path of highway travel, so it could not be built. The ART file is an access database with a graphical user interface that houses all of the tariffs and allows users to interact and modify them when needed.
- **6.d.** An example tariff would be one that is set up to prevent hubs from servicing a site outside the 8-hour reach of an STC. To encourage the desired behavior, a tariff was set up with a typical rate per mile to apply to transportation servicing all sites within 8-hours of the hub, and a second rate that applies a tremendous cost penalty to the model lane for trips that go beyond the 8-hour reach. This influences the model to limit hub routings to destinations within 8-hours:

Hub	Destination Distance	Rate per mile
Hub A	<= 8 hours	\$2.50
Hub A	> 8 hours	\$99,999

**6.e.** See response above to question 6d.

- 7. Please refer to USPS-T-1 at 28, lines 7-9. The Postal Service states that "Origin Dispatch of Values (DOVs) were based on 95<sup>th</sup> percentile machine end times, plus an additional 90 minutes for dispatch preparation and staging, or 03:30, whichever was earlier."
  - a. Please explain what is meant by "95th percentile machine end times."
  - b. Please discuss how the Postal Service prepared the source data used to calculate machine end times, for example, any data cleaning methods that removed observations.
  - c. Please discuss how sensitive the model is to changing the machine end times to the 90<sup>th</sup> percentile instead of the 95<sup>th</sup> percentile.
  - d. Please provide the source for the assumption that 90 minutes is an appropriate amount of time for dispatch preparation and staging. For example, what percentage of routes would not run on time if the model used the 90<sup>th</sup> percentile machine run end times instead of the 95<sup>th</sup> percentile machine run end times?
  - e. Please provide a discussion of whether the use of 90 minutes for dispatch preparation and staging applies to each and every facility and processing operation or whether the time for dispatch preparation and staging varies by facility and/or processing operations (e.g., letters versus parcels).
  - f. Please provide the data sources used to calculate the estimate of 90 minutes for dispatch preparation and staging.

- **7.a.** a. All outgoing machine end-times for a period of time were pulled by site and ranked by end-time. The 95th percentile end-time was selected to estimate a time when volume was available 95 percent of the time during that period.
- **7.b.** Machine end-times were pulled from EOR for operation numbers associated with outgoing processing. A 4-week period from October 12, 2019 through November 8, 2019 was selected and Sundays and October 15, the day after Columbus Day, were excluded. PSS ring scans and NMO sorters were excluded from the data set, as they represent manual operations or the hybrid operations where both outgoing and incoming could be represented in the data. The latest clearing operation time was

selected by day, and the 95th percentile time was selected, or typically the second latest time.

- **7.c.** The model itself is sensitive to times but given the slack time built into the network, it is less likely that shifting departure times forward or backwards would have a significant impact on the results.
- 7.d. Subsequent operations are required after the primary outgoing machine operations are completed, such as outgoing secondary, and manual processing of non-machinable volumes and machine reject flows. Operating plans traditionally allow for 30 minutes to complete secondary operations, and 30 minutes for manual operations, and another 30 minutes to collect and transport volumes from those operations to the dispatch operations. It is critical for mail operations to maintain timely down-flows and coordination to achieve these target clearance times for subsequent operations.
  Selecting an earlier availability time would reduce mileage, as it would increase the transit window. Modeling earlier dispatch times would not cause routes to become unrouteable.
- **7.e.** 90 minutes was added to the 95th percentile end time for all facilities.
- **7.f.** The 90 minute time was not calculated. It was selected based on historic operating plans and input and agreement from stakeholders.

- 8. Please refer to USPS-T-1 at 31, lines 14-18. The Postal Service states that "TMOD offers a variety of ways to approach many of our business rules, and seemingly small changes can sometimes have large unexpected impacts on the results due to the heuristic nature. To ensure we are using the best solution, each model is run multiple times to ensure similar results are obtained."
  - a. Please identify and describe the "small changes" tested on the model that yielded "large unexpected impacts."
  - b. Please confirm that factors not accounted for in the model, such as fluctuations in fuel cost, traffic, and existing service standards of other mail products such as Priority Mail, may have large unexpected impacts on the results. If not confirmed, please explain.

- **8.a.** One example of changes that were tested was the number of stops allowed in the model. Adding the ability to select 2-stop routings significantly reduces mileage. The mileage reduction benefits of adding stops beyond three quickly diminishes. Also, different transit hour reaches were tested from the STCs.
- **8.b.** Not confirmed. Priority Mail service is accounted for in the model. Traffic, or reduced transit speeds between lanes may have an impact, however most lanes are currently planned using similar speeds. Fluctuating fuel costs could have an impact on the savings estimates; however, as the cost of fuel increases for surface transportation, it would similarly impact air transportation. The modeling was intended to identify opportunities to reduce trips and mileage under different service standard scenarios, and help assess opportunity to transport volumes in the lowest cost transportation using service responsive modes of transportation.

# RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS OWENS TO PRESIDING OFFICER'S INFORMATION REQUEST NO. 6 (REDIRECTED FROM WITNESS HAGENSTEIN)

9. Please discuss any future plans that the Postal Service may have to change the service standards of other mail products. Please include whether maintaining existing service standards of other mail products may cause the expected transportation cost savings to not be fully realized.

#### **RESPONSE:**

Aside from the service standard change proposal at issue in this proceeding, the Postal Service is considering changing the service standards of First-Class Mail and Periodicals as set forth in Docket No. N2021-1. The Postal Service Board of Governors has responsibility for reaching decisions on changes to all service standards. At this time, the Board of Governors has not decided to change or seek an advisory opinion regarding changes to any mail products other than those at issue in this proceeding and Docket No. N2021-1. Maintaining existing service standards of other mail products does not affect the Postal Service's financial analyses of the changes proposed here.